UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,952	01/25/2002	James W. McCaherty	8350.0763-00	6974

58982 7590 11/22/2010

CATERPILLAR/FINNEGAN, HENDERSON, L.L.P.
901 New York Avenue, NW
WASHINGTON, DC 20001-4413

EXAMINER	
FISHER, MICHAEL J	

ART UNIT	PAPER NUMBER
3689	

MAIL DATE	DELIVERY MODE
11/22/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/054,952	MCCAHERTY, JAMES W.	
	Examiner	Art Unit	
	MICHAEL J. FISHER	3689	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 September 2010*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *17-29,31-40 and 42-50* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17-29,31-40 and 42-50* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 17-22,24-29 ,32-40 and 42-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over US PAT 4,605,081 to Helmly.

As to claims 17,33, Helmly discloses a computerized (fig 1) method for analyzing compliance with payload standard comprising a module for determining a first target payload (160, as best seen in fig 5), obtaining weight data for equipment (158, as best seen in fig 5), a module for comparing the two and analyzing compliance (168, 166, as best seen in fig 5) and further checks if the weight is over or under the target (col 2, lines 4-12) and a module for outputting the results (fig 4), the payloads are recorded (col 8, lines 43-46),

It would have been obvious to use the data for long term analyzing the payload as Helmly teaches the system as being used to comply with government regulations (abstract, lines 4-8) and if a particular place shows a pattern of placing a load that is above legal limits the company would be in danger of legal action taken against it, the period of time for analyzing compliance spans multiple different hauling events (it is used whenever the truck operates with a load)

As to claim 40, it is done periodically (whenever the truck is carrying a load). The loading practice would be modified based on the target payload (the amount dispensed).

As to claim 49, the system performs the tasks, therefore, it would have modules.

As to claims 18, Helmly discloses analyzing compliance (168, 166, as best seen in fig 5), analyzing compliance with a second payload standard (length of truck, 164, as best seen in fig 5) not equal to the first (weight).

As to claims 19, the target payload is based on type of payload (abstract, lines 8-13), it is inherent that different payloads would have different legal limits.

As to claims 20,21, Helmly discloses obtaining the empty weight (col 2, lines 20-22), as Helmly discloses it as being used more than once, it would be done for two or more pieces of equipment of the equipment type (tractor-trailer). Helmly does not, however, teach averaging the weights of multiple equipments (fleet or not). It would have been obvious to one of ordinary skill in the art to average the weights of multiple trucks for statistical purposes such as determining an average for all trucks of the same type.

As to claims 22 it would be inherent that a target payload is that which is added to the empty weight to achieve target payload, therefore, it would have been obvious to do this subtraction to determine the proper load.

As to claims 26, applicant has shown the percentage of acceptable overload to be old and well known in the art (paragraphs 2-6, starting on pg 1 of the specification of the instant application), as such, it would have been obvious to one of ordinary skill in the art to determine the percentages as the applicant has shown that this is well known. Compliance would have been checked using this standard.

As to claims 24, Helmly would have determined this if the payload weights were above the maximum threshold.

As to claims 27, Helmly discloses providing a compliance rating based on the comparison ("...within allowable weight", col 7, lines 43-51).

As to claims 28 Helmly determines the payload on a predetermined factor (maximum allowable weight).

As to claims 29 Helmly discloses graphically illustrating the results (fig 4).

As to claims 32, Helmly discloses determining equipment identification (col 5, lines 17-28).

As to claim 25, it would have been obvious to one of ordinary skill in the art to use the lesser of these values to ensure that the truck is compliant.

As to claims 34, 35, there is a network connection (fig 1).

As to claim 36, the output module is connected to a device to send data over a network (fig 1).

As to claim 37, there is shown to be a payload database (inherent in that the system is shown to have payload weight information, col 2, lines 4-10), a processor (fig 1), an equipment database (inherent in that there is shown to be information stored on the equipment) with payload standard information (what type of payload the vehicle can carry).

As to claims 38,46, it would have been obvious to one of ordinary skill in the art to obtain payload compliance data to check for compliance as overloading a vehicle could void the warranty.

As to claim 39, it would have been obvious to have a standard and to determine the numbers as this would quantify the results.

As to claim 42, it is old and well known in the art to know the time duration of a hauling event (there are many laws in place that require truck drivers to record their time driving to ensure they do not go over legal limits), therefore, it would have been obvious to record hauling time as this is often required by law.

As to claims 43, it would be obvious to change the numbers if they are found to not be accurate, thereby meeting the limitations as claimed.

As to claim 45, it would be obvious to use operation time as a long haul with a heavy load would be much harder on the truck than a shorter haul.

As to claim 47, the system always checks compliance, therefore, it would be over the "entire calendar period of time".

As to claim 48, it would be obvious to use the analysis for requesting warranty service as, as previously discussed, if the load was more than the warranty specifies for

that vehicle (even if it is legal for Dept. of Transportation purposes), then this would void the warranty and would mean warranty service would not be provided.

As to claim 50, Helmly discloses tracking underages (as previously discussed), it would be obvious to further parse for percentages to see if a particular operator or station routinely underloads vehicles as this would waste money.

Claims 23 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Helmly as applied to claims above, and further in view of US PAT 7,136,787 to Schlessinger et al. (Schlessinger).

As to claims 23 and 31, Helmly teaches a method and system as discussed above. Helmly does not, however, teach using statistical analysis, such as standard deviation, to refine the data.

Schlessinger teaches using standard deviation for statistical analysis (col 17, lines 38-40, claim 36, claim 53), therefore, it would be obvious to use standard deviation and statistical methods as taught by Schlessinger to refine the data of Helmly to ensure accuracy of computations to ensure compliance with the law on all payloads, as Helmly does not teach using the system only once, it would be obvious to track overloads so as to ensure proper payloads in the future to reduce the risk of fines.

Response to Arguments

Applicant's arguments with respect to the rejection under 35 U.S.C. 101 have been fully considered and are persuasive. These rejections have been withdrawn.

Applicant's arguments filed 9/9/10 have been fully considered but they are not persuasive. As to arguments in relation to modifying payloads, the prior art is used to ensure complicity with legal requirements (abstract lines 4-7), note that the bill of lading is only printed if the payload meets these requirements, it would appear to the examiner that the inventor intended the invention to make is so the payload would be changed if the load is not compliant as the bill of lading is necessary for trucks. While this is not specifically stated, the examiner's position is that it would be most obvious to do this to ensure compliance, as this is the purpose of the invention. As to arguments that Helmly controls loading according to the laws, as can be seen in the above referenced lines in the abstract, this is just not so, the prior art checks compliance and then produces a bill of lading if the load is compliant. If the load is not compliant, it would be most obvious to use the system to figure out how to make it compliant. As noted in the rejection, it would be obvious to use prior data, which the prior art discloses as saving, to ensure compliance if a certain loading facility is usually off in loading. The longer it takes to load one load the more it costs the less profit can be made from that procedure. As to modifying loads for piece of equipment, the laws are based on different size and weight trucks so this would be necessarily done or else the law would not be complied with. For instance, if one truck can take 1000 lbs of a material and another can take 2000 lbs, the system would know this in order to be able to comply with laws and regulations. As to

arguments about increasing the load, as can be seen in col 2, lines 13-16, the system checks to see if the load is "above or below legal limits", thereby meeting the limitations as claimed.

As to arguments in relation to the warrantor (page 21), merely asserting that the examiner cannot make an obviousness statement is not proper argument and as such, this is now admitted prior art.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL J. FISHER whose telephone number is (571)272-6804. The examiner can normally be reached on Mon.-Fri. 7:30am-5:00pm alt Fri. off.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MF

11/19/10

/Janice A. Mooneyham/

Supervisory Patent Examiner, Art Unit 3689